

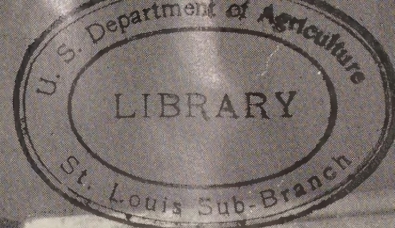
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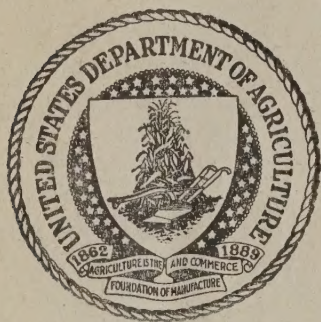
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Electrifying YOUR FARM AND HOME

RURAL ELECTRIFICATION ADMINISTRATION
WASHINGTON, D. C.

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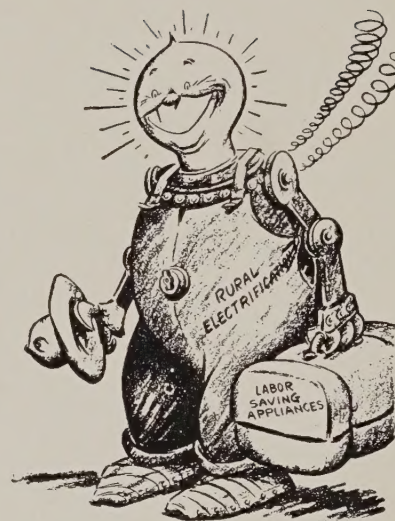


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HELLO BOSS

"I AM THE NEW HANDY MAN.

"I am moving out to the country to work. I have never been fired from a job in my life. I have turned motors and I have baked cakes. I have controlled the signal systems for the railroads, and I have run toy trains for children. I am not conceited when I say there is just about nothing I can't do if only I have the proper equipment.

"And, Boss, I am so full of energy that I never sleep. I never take time out to eat. The wages I ask are small. If you let me do enough work, I'll promise to increase your income and save you so much time and strength that you won't even miss what you pay for my services. I'll light your home,

your yard, and barn. I'll pump the water for your family and heat it, too. I'll hoist the hay, grind the feed, saw the wood, and irrigate the fields. I'll milk the cows and cool the milk and I know new tricks in looking after poultry that will make them pay you well.

"Your wife will be pleased with my work, too, Boss. I can clean the house, wash the clothes and iron them, sew and cook, and relieve her of a dozen duties that use all her time and sap her strength.

"I want this job, Boss. If you give me a chance, I'll make your farm look like a different place. I'll make life for you and the whole family easier and happier. How about it? Do I get this job? Thanks, Boss."



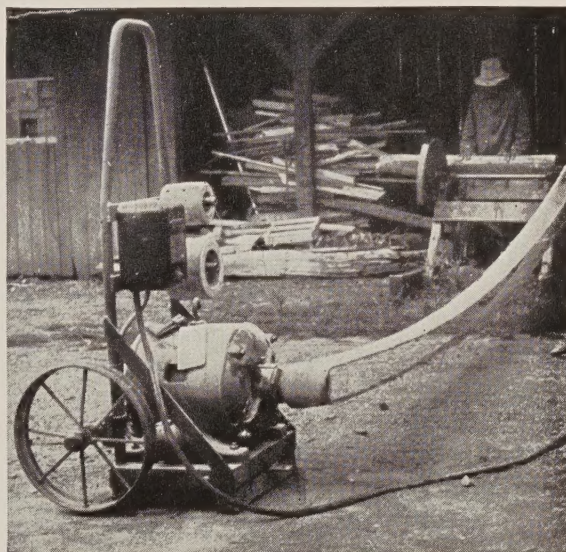
PLANNING FOR POWER

THIS booklet is being sent to you as a new rural user of electricity, that you may know what electric power can—and should—do for you.

Probably for a long time you have looked forward to the day when electricity would light your home and farm. That day is here. Soon, at the flip of a switch, you will have light. The time you grudgingly gave to filling and cleaning unsafe oil lamps can be used in more pleasant and more profitable ways. But stop to consider that the electricity that flows through the wires to your farm will do a hundred and one other things for you if you will give it a chance.

To hire itself out as a "handy man" and tireless servant, electricity asks only this of you: That you outline the chores that you want it to do, and furnish the proper equipment; that you give it adequate "highways" (wires) to travel to the places where it is needed; and that you furnish plenty of "outlets", that it may do its work. Then this handy helper will work the round of the clock for small wages. It will do its work so quickly and efficiently that it will save you money in the long run.

The reason that electricity is so generally used in cities and factories is that it is the cheapest, cleanest, and quickest power known. It has this added and important quality: The more it is used, the cheaper it becomes. Plan now to let electricity make your life easier and your farm more prosperous. The Rural Electrification Administration stands ready to help you with your plans.



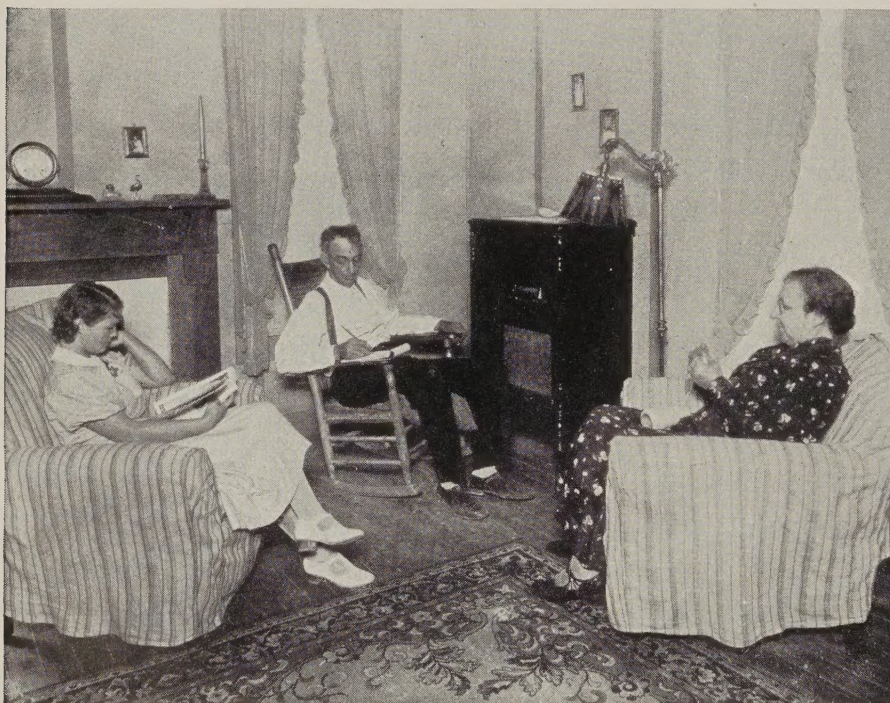
ELECTRIFY YOUR HOME

IF your home now—as you read this booklet—is poorly lighted, if hours are spent pumping and carrying water, if kitchen duties are a never-ending drudgery and washday a nightmare, then you may well ask: Are you working for your home, or is your home working for you?

Electricity, whose magic touch has done so much to transform millions of city houses into real homes, is ready to do the same in many rural areas. Here are some of the benefits and helpful aids it can bring to you.

LIGHTING

Good lighting in the home means comfort, safety, convenience, beauty. It safeguards that priceless asset, your eyesight. Every room naturally presents its own lighting problem. That problem should be met by correctly answering the question, "Where do I want light and how much light do I want?" The selection of lighting fixtures, with the proper size of lamps, must be made first on the basis of their efficiency to do the job and, secondly, on their style and fitness as to decoration.



Electricity has made this farm home a far more comfortable living place for the entire family.

Besides hot and cold running water in the kitchen, electricity makes possible a modern bathroom and an ample, outside water supply for irrigation and livestock.



WATER SYSTEMS

Statistics show that farm women carry an average of 50 tons of water each year. That means, for this one chore alone, a full month of 8-hour days and about 200,000 unnecessary steps in the process.

The same figures also show that the average farmer spends about 1½ months out of every year pumping and carrying water for farm uses.

The benefits of running water in the farm home and on the farm itself are too numerous and obvious to require detailed comment. Running water in any home means health and comfort for everyone who lives in it. In safeguarding the health of children it is important.

The one ever-present danger of fire should alone be sufficient reason for the installation

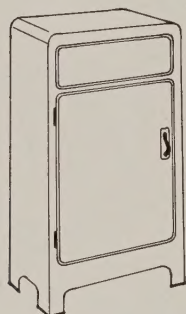
of an electric water-pressure system. For average purposes a water-pressure system is recommended which will be able to deliver at least 300 gallons per hour. In addition to fire protection, such a system will provide for kitchen, bathroom, sprinkling, and for the stock.

With running water the problem of satisfactory sewage disposal may be easily solved. A well-designed and built septic tank gives complete protection in the matter of disposing of farm sewage.

Obviously, the cost of operating such a system will vary greatly according to the amount of use required. However, it is possible to estimate an average monthly power consumption of from 20 to 30 kilowatt-hours.¹

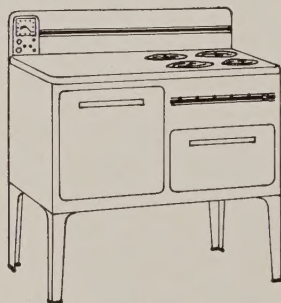
¹ A kilowatt-hour (kw.-hr.) is the unit of measurement of the amount of electricity consumed.

ELECTRIC REFRIGERATOR



THE electric refrigerator is a leader among the time, labor, and money saving appliances in the farm home. With it your ice problem vanishes for good. Your food is perfectly preserved in spacious, clean, and dry compartments. You have ice cubes whenever you want them. The electric refrigerator works automatically and is plugged into a regular convenience outlet. Various types and sizes are available. Average monthly consumption is about 50 kilowatt-hours.

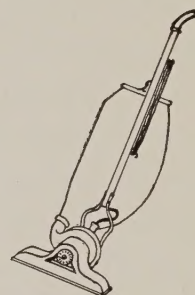
ELECTRIC RANGE



ONE of the greatest time savers, the electric range solves the cooking and fuel problem in the farm home. It makes for coolness. It is clean, fast, and eliminates

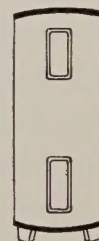
the work of carrying fuel and ashes. An average size is the four-burner electric range with oven, but there are several other sizes available. Average power use is 150 kilowatt-hours per month, or 30 kilowatt-hours per person per month.

VACUUM CLEANER



AN ELECTRIC cleaner gets rid of dust and backaches. It solves your cleaning problem and banishes drudgery. Standard attachments are provided for special cleaning jobs, such as removing dust from curtains, upholstered chairs and sofas, cushions, etc. Average monthly consumption is about 4 kilowatt-hours.

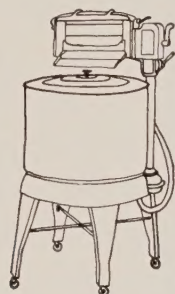
AUTOMATIC WATER HEATER



IT IS scarcely necessary to add that, having obtained an electric pressure system supplying your home and farm with

water, you may want an automatic water heater installed in your kitchen. You will find your automatic electric water heater a great source of comfort in many ways. Average monthly consumption is about 275 kilowatt-hours.

ELECTRIC WASHER



AN ELECTRIC washer makes your washday welcome. Your washing is done magically, a great saving in your time, health, and comfort and the clothes last longer. Plugs into any convenient outlet (wall or base plug), and works automatically. Average monthly consumption is about 3 kilowatt-hours.

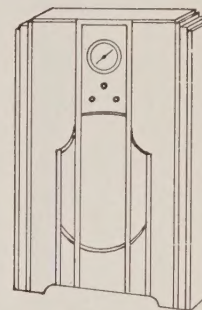
ELECTRIC IRON



DO YOU dislike hot stoves and hot kitchens? Certainly you do. And with an electric iron you avoid discomfort and save time. It's very inexpensive to operate, too. The value of the electric iron is proven conclusively by the fact that it is used in nearly 98 percent of America's wired homes.

Average monthly consumption is about 6 kilowatt-hours.

RADIO



THE MODERN farmer knows very well the benefits and pleasures to be obtained from radio. The electric radio receiving set is connected to the convenience outlet, insuring constant service and eliminating the periodic expense and inconvenience of dry cells and storage batteries. With an electric radio you are always sure of service and, of equal importance, uniformly good service. Average monthly consumption is about 10 kilowatt-hours.

OTHER APPLIANCES

OTHER APPLIANCES which serve in the completely electrified farm home are the ironing machine (uses about 1.4 kilowatt-hours per hour) and oil-burner equipment (electrically operated for furnace). The following handy electrical devices for use in the home consume very little electricity each month. They are the toaster, griddle, fan, curling iron, churn, ventilating fan, waffle iron, heating pad, grill, hot plate, percolator, casserole, cooker, and vibrator.



Outlets on farm buildings and 40 feet of cable permit use of this 5-horsepower portable motor for dozens of heavy tasks.

WIRED HELP FOR THE FARM

EVERY farm, large or small, is a business and demands good business methods.

Electricity on the farm means the most efficient and most economical operation. It saves time and increases production.

Electricity can grind feed, elevate grain, milk cows, cool milk, run clipping and shearing machines, shell corn, saw wood, light yards and barns, and do many other chores at little cost. The more power you use, the cheaper it gets.

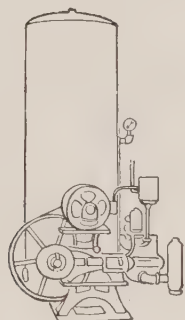
With electricity available to pump water in time of need, crops, otherwise lost, can be saved. Fire in the rural home or barn frequently means a total loss. Records show

that the annual fire loss in rural areas averages about \$250,000,000. With water under pressure, this danger to life and property can be minimized. Finally, electrically pumped water for the livestock saves much hard work, and insures an adequate supply so essential to good health and maximum production.

Most of these jobs are done with an electric motor. A 1-horsepower motor can do the work of 10 men.

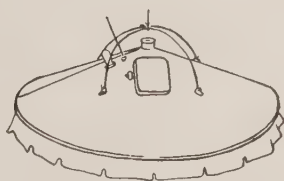
Rural electrification can make farming an easier and more prosperous business. It is time to plan for the things electricity will do on your farm.

WATER SYSTEMS



AN ELECTRIC motor will bring you water for irrigation and for your livestock. You do not need to be told what an adequate supply of water means. You know. The electric motor is the instrument that provides you with the water you need under sufficient pressure to meet your every purpose. Naturally, the size of the motor employed will be determined by the size of the job to be done. From the standpoint of fire protection alone the obtaining of an adequate pressure system is more than justified.

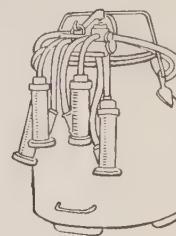
ELECTRIC BROODING



THE ELECTRIC brooder insures a constant supply of clean, warm air, providing adequate circulation without drafts. The electric brooder places all the heat where it is needed—into the hover—and maintains the scientifically correct temperature. It produces faster and more vigorous

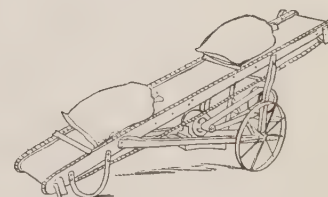
growth of well-feathered chicks, with a tremendous reduction in labor, and eliminates fire hazard. The brooder comes in various sizes; be sure that the one you get is large enough. Average power consumption is one-half kilowatt-hour per chick (6 weeks).

MILKING



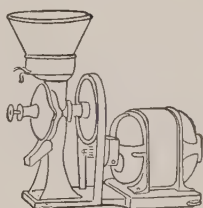
IN ADDITION to the obvious elimination of tiresome physical work, an electric milking machine cuts the milking time in half. In many cases the use of an electric milking machine has been found to increase the total milk production. Average monthly consumption to milk 10 cows is about 20 kilowatt-hours.

GRAIN ELEVATING



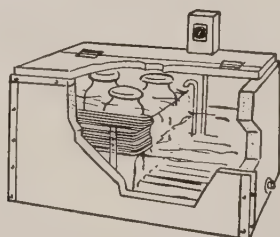
AT THE grain elevator the portable electric motor is suggested for elevating shelled and corn grain. The conveyor, of course, to be run at the desired speed, taking from 1½ to 5 kilowatt-hours per each 1,000 bushels elevated.

FEED GRINDING



THE TIME- and labor-saving benefits of electrical feed grinding, besides the profit from having freshly ground feed available, are obvious. Feed grinders from one-half horsepower size and up are available. They save those costly trips to town and grind feed very inexpensively and with little attention. Power consumption is from one-third to 3 kilowatt-hours per 100 pounds of feed, depending on fineness of grinding.

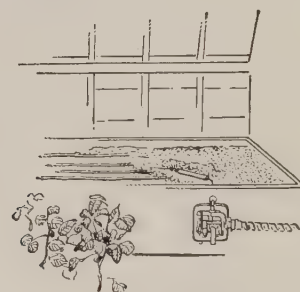
MILK COOLING



THE ELECTRIC milk cooler eliminates your losses from spoiled or rejected milk and increases your profits by enabling you to deliver the highest quality milk in summer or winter. The investment in an electric milk cooler is about the same as the cost of an equipped ice house and the cost of electricity to operate the cooler is about one-half the cost of purchased ice. The cooler reduces the milk temperature to the safe zone quickly and automatically keeps the milk cool. It eliminates those regular trips to the

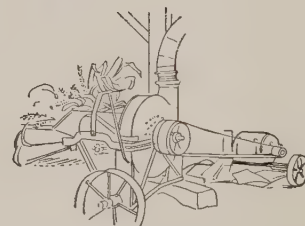
ice house or to town for ice. Average power consumption is 30 kilowatt-hours per month per 10 gallons cooled each day.

SOIL HEATING



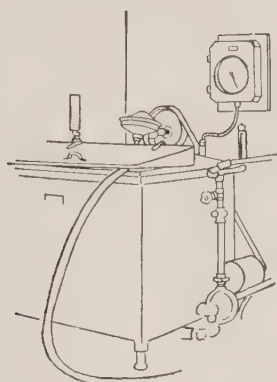
ELECTRIC soil heating in hotbeds and propagating benches maintains that uniform ideal growing temperature to produce a more vigorous, uniform growth of young plants in a much shorter time. Electric beds are cleaner, need not be rebuilt each season, and cost very little to operate. Power consumption is 1 to 3 kilowatt-hours per sash (3 by 6 feet) per day.

SILO FILLING



THERE ARE many uses to which electric motors can be put on the modern farm to facilitate various kinds of grinding and elevating work. For example, a 5-hp. utility motor can be employed at the silo to operate the silo filler. This method requires fewer men and less hurrying, and takes but 1 to 1½ kilowatt-hours per ton.

DAIRY STERILIZERS AND WATER HEATER



TO PRODUCE high-quality milk profitably it is necessary to keep bacteria from getting into the milk from utensils. Electric dairy sterilizers, available in several sizes and types, solve this problem very nicely, or a dairy water heater will help you fight the bacteria-count battle. For dairy-utensil sterilizing for 10 to 40 cows, the power consumption is $3\frac{1}{2}$ to $7\frac{1}{2}$ kilowatt-hours per day.

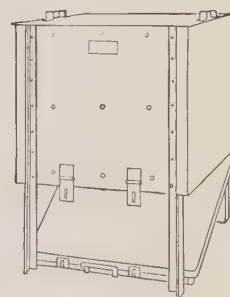
LIGHT AND PLANT GROWTH



FLORISTS AND market gardeners find the use of the same type electric lamps used in your home or barns very profitable for bringing flowers into bloom

and controlling plant development to be ready for market at the time they will command the highest price. Lamps in greenhouses or hotbeds can be turned on evenings or mornings to supplement normal daylight with low-intensity artificial light to either stimulate or retard blooming of flowers and stimulate plant growth. Thus light and soil heating make it practically possible to predict the day your crops will be ready for market.

SOIL STERILIZING



NURSERYMEN find it highly desirable and profitable to raise young crops in beds free from plant enemies such as diseases, insects, and weeds. The electric sterilizer places this directly under the operator's control and in a convenient and agreeable form. Power consumption is from 1 to $1\frac{1}{2}$ kilowatt-hours per cubic foot of soil.

ELECTRICITY ON THE POULTRY FARM

IT IS WELL known that electric light in the poultry house during the fall and winter months produces real profits from greater production when prices are highest. The cost is very little. Another factor which

increases egg production during the winter is warmed drinking water. If the water is warmed hens drink on the average of 25 percent more water during the cold weather. There are several types of electric heaters available for warming drinking water for poultry. The cost for current used is negligible, since ordinary 25- to 75-watt heaters are used. The electric incubator is so far superior to any other type that very few incubators now available are other than electric. Power consumption is from 150 to 300 kilowatt-hours for 1,000 eggs incubated.

OTHER USES

ELECTRICITY has many other applications. For example, it is of great value in the workshop, where some of the time- and money-saving devices are the electric drill, electric soldering iron, electrically operated drill press, grindstone, and emery wheel. Some other valuable uses for electricity include hay hoisting and wood sawing. Egg candling, feed mixing, the operation of a clipper or shearer, and various heating and lighting jobs may also be mentioned.

YARD AND BARN OUTLETS

WHEN WIRING your place, make it easy for electricity to work for you. Look ahead to the new electrical equipment you will buy each year. See that you have enough outlets on and in all farm buildings for the many services of a portable motor. Provide today for tomorrow's needs.

YARD AND BARN LIGHTING

A CENTRALLY located floodlight in the farmyard is both a convenience and a protection. The amount of light for various farm buildings depends on the visual demands of the work to be performed. In farm buildings, as well as in the farmhouse, avoid working in your own shadow. Make sure enough light is provided for the speedy performance of all farm tasks.

WIRING INSPECTION

YOU WILL save both money and trouble if your wiring is installed by a contractor thoroughly experienced in farm wiring. When the job is finished it should be checked by an electrical inspector. Make sure your wiring installation is safe and adequate for all your needs.





A three-wire system means that this farm home will need no rewiring when a range or large motor is added to equipment.

MAKE YOUR WIRING ADEQUATE

ELECTRICITY cannot do good work for you unless you give it the right tools to work with—and enough of them! In other words, it cannot work well if the working conditions are not right.

All electricity needs in the way of working tools is good electrical wiring and plenty of convenience outlets (wall or base plugs) and switches. In plain words, there must be **adequate wiring**, installed to fit the job you want done.

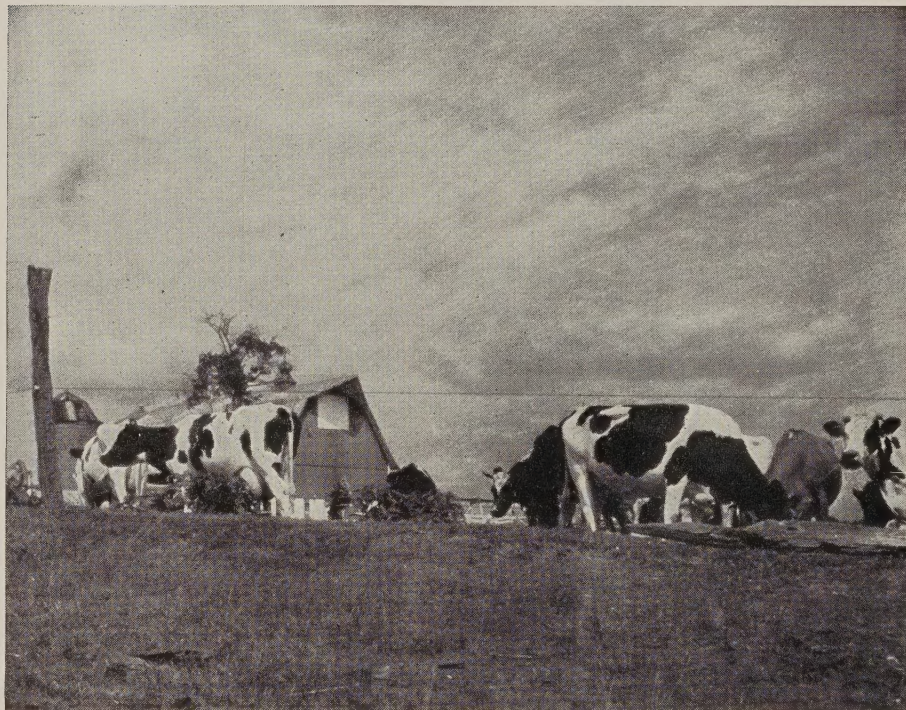
When you have decided what chores you want done around the house and on the farm and in the farm buildings, you can then tell the contractor who will do your wiring just

what you require—in detail. Be sure you get a competent man. Then be sure you tell him exactly what you want in the way of electrical service. What is equally important, be certain to make some estimate of your future needs. If, later on, you are going to increase the use you make of electricity, you must tell him **now** so that he will wire your farm and buildings **adequately—for your future as well as your present needs**.

In closing here are just a few important things to remember:

1. Have enough convenience outlets and switches, properly placed, in every room and building.

2. Avoid having lengths of electrical cord on the floor, under the carpet or across doorsills.
3. Arrange the placing of convenience outlets so that you can do your work conveniently. Among other things, that means you will not work with a shadow across the place you are working.
4. Remember that for the heavier duty appliances, such as the electric range and water heater, heavier duty wires are needed. This requires a special type of installation. Therefore, you must be sure to tell the man who is to do your wiring exactly what appliances you are going to operate now and later and where you want them placed.
5. Have enough lighting switches installed at the proper points so that you can light your way ahead, particularly a stairway, hall, basement, attic, hay mow, or back-porch steps.



THE PURPOSE OF THIS BOOKLET

REA has prepared this booklet in the hope that it will bring you the message of what complete electrical service will mean to you and every member of your family both in your home and on the farm itself.

Electricity holds tremendous promise for the farms of the United States. REA is trying to change what is today a great hope into an equally great actuality.

REA is organized to assist the farmer, through loans, to obtain electric service. In doing so, REA will deal with local organizations—local cooperatives, incorporated electrical contractors, private utilities with rural service lines, and State, district, or municipal electric systems operating rural lines. REA will not lend funds to individual farmers directly, nor can it finance wiring on just a few farms. The loans must be used to wire a fairly large group of farms, so that economies of mass construction can be realized.

These loans are to be used for installing all the wiring necessary to prepare the farm for the installation of household fixtures and appliances, as well as electrical farm equipment. The loans do not cover the fixtures themselves.

Your local contractor is prepared to help you with your wiring problem. However, if you have further questions which he is

unable to answer, the Rural Electrification Administration at Washington, D. C., will help you.

It cannot be emphasized too strongly that the more extensive use the farmer makes of his electrical service to operate farm machinery and household appliances, the greater assurance he will have that his electrical system will be successful and economical in the long run.

This means:

First—An adequate wiring installation.

Second—Purchase of quality appliances and equipment and enough of them.

Third—Making the greatest possible use of your electrical service.



“... ONLY A BEGINNING HAS BEEN MADE ...”

“Experience in other industries indicates that only a beginning has been made in adapting farm operations to economical use of electricity. Further research will make it practicable to increase greatly the farm electric load so that this power will be very profitable to the user. . . . Rapid extension of power lines to serve farms, which has been started under public auspices, will do much to stimulate progress and will make possible introduction of many labor-saving devices in farm homes. The wise use of electricity in agriculture should lower cost of production, improve quality of produce, lighten the labor of farm people, and make possible more comfortable living on the farm.”

**FROM THE REPORT OF THE NATIONAL RESOURCES COMMITTEE
“TECHNOLOGICAL TRENDS AND NATIONAL POLICY”**